

**CURRICULUM VITAE: Richard Harriss Gammon**

Address: Chemistry Department Box 351700  
University of Washington  
Seattle, Washington 98195-1700

**EDUCATION:** B.A.(Chemistry), 1965, Princeton University, Princeton, N J  
M.A., 1966, Harvard University, Cambridge, Mass  
Ph.D., 1970, Harvard University (Physical Chemistry)

**HONORS AND AWARDS:**

- Phi-Beta-Kappa and High Honors in Chemistry, Princeton University, 1965.
- Dow Award for Excellence in Chemistry Teaching, 1968.
- NSF Postdoctoral Fellowship, Astronomy, U of California, Berkeley, 1970-71.
- NOAA/ERL Outstanding Research Article Awards, 1986, 1988.
- Fulbright-Hayes Fellowship, Laboratoire de Glaciologie et de Geophysique de l'Environnement, Grenoble, France, 1995

**EMPLOYMENT:**

- 1989- Professor, Department of Chemistry and School of Oceanography, University of Washington, Seattle, Washington
- 1988-1989 Visiting Professor, Institute for Environ. Studies, University of Washington, Seattle, Washington
- 1986-1989 Oceanographer (GM-14), NOAA/Pacific Marine Environ. Lab., Seattle, Washington
- 1984-1986 Research Chemist, NOAA/Pacific Marine Environ. Lab., Seattle, Washington
- 1985-1989 Affiliate Associate Professor, Chemistry Department, School of Oceanography, University of Washington, Seattle, Washington
- 1982-1984 Chief, Carbon Dioxide Group, Geophysical Monitoring for Climatic Change, Air Resources Laboratory, NOAA Environmental Research Laboratories, Boulder, Colorado

## **PROFESSIONAL ACTIVITIES:**

- Member, Ocean Studies Board (OBS), Nat'l Academy of Sciences (1984-1987) \*Member, Ocean Climate Research Comm. (OCRC), Ocean Studies Board, Nat'l Academy of Sciences (1986-1987)
- U.S. Delegate, Scientific Comm. on Ocean Research (SCOR), (1985-1990) \*Member, Ocean Carbon Dioxide Panel, Ocean Studies Board, Nat'l Academy of Sciences (1988-1990)
- Member, Ocean Carbon Dioxide Panel, Comm. on Climate Change and the Ocean, (1986 - 88), Scientific Comm. on Ocean Research, International Oceanographic Comm'n (SCOR/IOC)
- Fellow, Cooperative Institute for Research in Environ. Science, (CIRES), University of Colorado, Boulder, CO (1982-1984)
- Senior Fellow, Joint Institute for Study of the Atmosphere and Oceans, (JISAO), University of Washington, (1985-present); JISAO Council (1985-1988)
- Member, World Ocean Circulation Experiment (WOCE), U.S. Scientific Steering Committee (1989 - 1992)
- Contributor to UNEP/IPCC (Intergovernmental Panel on Climate Change) Scientific Assessment: Climate Change, Chapter I: "Greenhouse Gases and Aerosols"(1990)
- Member, NOAA Global Change Postdoctoral Fellowship Selection Panel (1994-1996), Chair (1995-1996)

## **SELECTED RECENT PUBLICATIONS:** (47 peer-reviewed publications)

Bates, T, K Kelly, J Johnson, and R Gammon (1995) " Regional and Seasonal Variations in the Flux of Oceanic Carbon Monoxide to the Atmosphere" J. Geophys. Res. 100: 23093-23101.

Weiss, P, J Johnson, R Gammon, and T Bates (1995) "A Re-evaluation of the Open-Ocean Source of OCS to the Atmosphere" J Geophys Res 100: 23083-23092

Bates, T, J Johnson, K Kelly, and R Gammon (1996) "A Reevaluation of the Ocean Source of Methane to the Atmosphere" J. Geophys. Res. 101: 6953-6962

Dixon, K, J Bullister, R Gammon, and R Stouffer (1996) "Examining a Coupled Climate Model Using CFC-11 as an Ocean Tracer" Geophys. Res. Lett. 23 : 1957-1960

L Landrum, R Gammon, R Feely, P Murphy, K Kelly, C Cosca, and R Weiss (1996) "North Pacific Ocean CO<sub>2</sub> Disequilibrium for Spring-Summer 1985-89" J. Geophys. Res. 101 : 28539-28555

Warner, M , J Bullister, D Wisegarver, R Gammon, and R Weiss (1996)"Basin-wide Distributions of Chlorofluorocarbons CFC-11 and CFC-12 in the North Pacific 1985-89" J. Geophys. Res. 101: 20525-20542

Murphy, P, R Feely, E Harrison, and R Gammon (1998) " Variability of Delta-pCO<sub>2</sub> in the Subarctic North Pacific: A comparison of Results from Four Expeditions" Tellus 50B: 185-204

Huang, W., X. Bu, L. Nguyen, R Gammon, and J Bullister (2000) "Production and Consumption of Methyl Halides in a Freshwater Lake" Limnology and Oceanography, (in press).

Quay, P.D, S King, D White, M Brockington, B Plotkin, R Gammon, S Gerst, and J Stutsman (2000) "Atmospheric <sup>14</sup>CO: a tracer of OH concentration and Mixing rates" J. Geophys. Res (in press).

### **CURRENT RESEARCH INTERESTS:**

Global Biogeochemistry/Cosmochemistry: Trace gases and climate control. Co-evolution of climate and life. Global carbon cycle. Natural and perturbed biogeochemical cycles of nitrogen, sulfur, and halogens. Paleo-atmospheric chemistry (polar ice cores). Ocean as source/sink for climate gases.

Dr Richard H. Gammon is Professor of Chemistry and Oceanography, and Adjunct Professor of Atmospheric Sciences at the University of Washington. He received a BA in Chemistry from Princeton University (1965), an MA and PhD in Physical Chemistry from Harvard University (1970).

Dr Gammon was a co-author of the 1990 Scientific Assessment by the Intergovernmental Panel on Climate Change (IPCC), and, as Chief of the Carbon Dioxide Program, Geophysical Monitoring for Climate Change, directed the US program to globally monitor the atmospheric concentration of CO<sub>2</sub> (NOAA Environmental Research Laboratories, Boulder, 1982-84).

He currently teaches undergraduate and graduate courses in chemistry, oceanography, and atmospheric science. His current research involves the study of atmospheric trace gases (CO<sub>2</sub>, CH<sub>4</sub>, CFC's, OCS, methyl halides) critical to climate change. Dr Gammon is actively involved in improving the public understanding of the climate change challenge.